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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,251	02/10/2000	Josef Theurer	THEURER-21	3590
20151	7590	12/05/2003	EXAMINER	
HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE SUITE 4714 NEW YORK, NY 10118			WEST, JEFFREY R	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/501,251	Applicant(s) THEURER ET AL.	
	Examiner Jeffrey R. West	Art Unit 2857	

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspond nc address --**
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,821,933 to Plasser et al. in view of U.S. Patent No. 5,233,357 to Ingensand et al.

Plasser discloses a method of surveying a track comprising positioning a mobile measuring vehicle and a stationary measuring vehicle at end points of a track section to be measured during a measuring cycle, the mobile measuring vehicle being designed for mobility along a reference line in the form of an optical measuring beam between an emitter mounted on the stationary measuring vehicle and a receiving unit mounted on the mobile measuring vehicle and supported by flanged rollers (column 6, lines 66-67) on the track section (column 5, lines 5-34 and column 7, lines 18-46). Plasser discloses determining, at the start of each measuring cycle, position coordinates of the emitter/stationary measuring vehicle relative to a fixedly installed reference location adjacent the track section to be measured, the coordinates of the reference location being known within a terrestrial coordinate system, and aligning the reference line with the mobile measuring

vehicle on the basis of the position data determined with the aid of the location information provided by the reference location (column 8, lines 9-12). Plasser discloses registering, as a correction measurement value, a change in the position of the receiving unit relative to the reference line in dependency on an actual track position of the receiving unit transmitted by an odometer attached to the flanged rollers, as the mobile measuring vehicle advance in the direction towards the stationary measuring vehicle to survey the track (column 6, lines 6-32 and column 8, lines 12-33).

While Plasser does disclose determining the initial position of the emitter/stationary measuring vehicle based upon reference locations adjacent the track section (column 3, lines 10-16), Plasser doesn't disclose using a GPS receiver in order to determine the position of the emitting surveying apparatus.

Ingensand teaches a surveying system comprising a surveying device that contains a GPS receiver fixed thereon (column 2, lines 23-33) wherein the surveying device emits a beam to survey the position of several points based upon the initial position of the device determined by the GPS receiver (column 2, lines 34-36 and 64-68).

It would have been obvious to one having ordinary skill in the art to modify the invention of Plasser to include using a GPS receiver in order to determine the position of the emitting surveying apparatus, as taught by Ingensand, because Plasser teaches a time-consuming inaccurate method for determining the position of the mobile device based upon telegraph poles and

marking posts (column 2, lines 27-32) and Ingensand suggests that the combination would have provided a method for determining this initial position with a faster, more convenient method as well as with increased accuracy (column 1, lines 21-30). Further, the invention of Plasser was published in 1974. At this time GPS devices were not readily available, however, one having ordinary skill in the art would recognize that since the publication of the invention of Plasser, GPS has become a well known, accurate, and convenient system for determining the exact position of devices, as would have been applicable in the invention of Plasser.

Response to Arguments

3. Applicant's arguments filed 13 November 2003 have been fully considered but they are not persuasive.

Applicant argues that "[a]n artisan interpreting the Plasser reference as the Examiner suggested, i.e. disclosing a surveying method that is time-consuming and inaccurate, would take the teaching of Ingensand and replace the optical measurement process of Plasser et al. with the GPS system, as taught in Ingensand." Applicant contends that "[t]he error in the Examiner's line of reasoning lies in the suggestion that an artisan would be motivated to modify the optical measurement system according to Plasser et al. only as far as the initial stage is concerned. There is no teaching or suggestion supporting this interpretation. . . . Nothing in the applied prior art suggests this desirability of the modification. To the contrary, as stated above, the artisan

would be motivated only to replace the whole optical measurement system of Plasser et al. with the GPS system of Ingensand et al.”

The Examiner disagrees with Applicant’s position for the following reasons. Plasser discloses determining, at the start of each measuring cycle, position coordinates of the emitter/stationary measuring vehicle relative to a fixedly installed reference location adjacent the track section to be measured and aligning the reference line with the mobile measuring vehicle on the basis of the position data determined with the aid of the location information provided by the reference location (column 8, lines 9-12), wherein the initial location determination is a time-consuming and inaccurate method for determining the position of the mobile device based upon telegraph poles and marking posts (column 2, lines 27-32). On having ordinary skill in the art would be motivated to replace this initial system with the GPS system of Ingensand.

The optical method of Plasser, however, is more complicated than simple position determination. This optical method determines deviations of the track from a desired position (column 1, lines 56-67) for use in a track lining, leveling, and tamping machine (column 2, lines 42-47) thereby allowing the lateral and leveling adjustment of the track (column 7, lines 41-46) as well as providing communication between the optical system and an odometer system during measuring and adjusting operation (column 6, lines 6-32 and column 8, lines 12-33). Therefore, since the optical measurement system of Plasser is a complex system that performs comparison operation with respect

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to expected positions and provides for different types of adjustment detection, not readily detectable by a general GPS system, one skilled in the art would not be motivated to replace this optical system with the GPS system. As noted above, however, the initial detection of a fixed location is not a complicated measurement and one having ordinary skill in the art would recognize the ability to replace a system that determines an initial location based upon telegraph poles and marking posts with the GPS system of Ingensand.

For these reasons, the combination of Plasser and Ingensand are properly combined to meet the current invention as claimed.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation exists in the references themselves because Plasser teaches a time-consuming inaccurate method for determining the position of the mobile device based upon telegraph poles and marking posts (column 2, lines 27-32) and Ingensand suggests that replacing this aspect with a GPS system would have

provided a method for determining this initial position with a faster, more convenient method as well as with increased accuracy (column 1, lines 21-30).

Further, one having general knowledge of the art would recognize that Plasser was published in 1974, a time when GPS devices were not readily available, and also recognize that since the publication of the invention of Plasser, GPS has become a well known, accurate, and convenient system for determining the exact position of devices.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from

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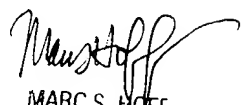
the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw

December 1, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800